5. Align CTE/Career pathway conversations from Arizona's Skills Standards Commission and the Arizona Chamber of Commerce Skill Pathway workgroup and include ECAP / Program of Study development as a key tool to determine Industry Certification opportunities

Vision: Every student has an ECAP that fits in to a broader program of study

National Drop-Out Prevention Category: Career and Technical Education

Background:

Career pathways are getting a lot of attention, nationally. In the last 10 years, several programs were launched and faded away, and others have just recently formed. ***Concepts around career pathways are often associated with dropout prevention, but are also becoming a larger part of an employer-driven conversation about the need for skilled employees – regardless of whether or not they once dropped out or not.*** Thus, recent concepts around career pathways fall into two categories: education driven initiatives that may or may not include business and industry partners (but usually do on some level), and employer-led initiatives that are blind to whether or not a student has dropped out or has ever been at risk of dropping out. ***Both have similar objectives: ensuring all students attain relevant, meaningful skills for success in today's economy.***

Education-led initiatives

Several education-led initiatives are worth noting – however, ***few have been sustainable and others are quite new. The most promising current endeavor comes from South Carolina***. In 2005 South Carolina enacted the Education and Economic Development Act (EEDA), also known as Personal Pathways to Success, and devoted $28 million per year – most of which goes to districts for five things:

- Curricula organized around career clusters
- Student-to-guidance personnel ratio of 300:1
- Individual graduation plan conferences for all students grades 8-12
- Evidence based programs to meet the needs of students at-risk of dropping out and
- Opportunities for students to participate in experienced-based, career-oriented learning activities.

The EEDA coordinating Council was created to advise the South Carolina Department of Education on the implementation of the act. The Council was comprised of representatives from state and local government, the business community, secondary and post-secondary institutions. The Council met for six years to develop strategies and create new resources to remove potential obstacles, including the lack of funding equity across districts and a uniform compliance assessment.

Currently in its second year of full implementation, the state reports the following results:

- Every state high school offers at least 3 of the 16 career clusters
- Over 540 career specialist FTEs have been funded, although all schools have not yet met the ratio requirement

- Individual graduation plans have been developed and/or revised for more than 543,000 students - 99% - in grades 8-12
- Almost 99% of the at-risk students in SY 2011 who participated in an EEDA program were still enrolled or had graduated from high school in SY 2012
- The total number of drop-outs have declined by 26% since SY 2008

Several states have also tried comprehensive pathways programs, but they have met with limited success. ***Mississippi State University's Research and Curriculum Unit created a Career Pathways Advisory Taskforce, to design pathways for High School Redesign and Dropout Prevention.*** The Advisory Taskforce included business and industry representatives, teachers, counselors, higher education, state Department of Education and instructional design specialists. The task force developed seven specific clusters and more detailed pathways for recommendation to the state department of education as part of a more comprehensive dropout prevention/workforce development plan. Another component of the plan included use of Mississippi's WE WORK center (Workforce Education with Online Learning for Real-World Knowledge) which provided the following services:

- Online Career Counselor and/or Crisis Hotline
- WE WORK Website
- Career Resources
  - MS Industries
  - Postsecondary and Higher Education Information
  - Resume Samples, Cover Letters, Interviewing Skills, etc.
- Career/Industry Certifications
- Virtual High School/Virtual Community College
- Modules
  - Drop-out prevention
  - Employability skills
  - Basic Industrial Skills
  - Quality Management Skills
- Academic Testing (ACT/PSAT)

It is unclear whether the We Work centers are still in operation, and no current information (or a website) could be located online for this paper.

In 2009, ***Louisiana Governor Bobby Jindal launched a dropout prevention pilot program*** that partnered the state Department of Education, business groups, the Louisiana Workforce Commission, the Higher Education and the Department of Social Services – Educational Mission to Prepare Louisiana's Youth (EMPLoY). Fourteen districts participated in the pilot which provided GED support, industry-based certifications, dual enrollment and work-ready certificates so that students who didn't finish traditional high school would still have the knowledge and skills they need to enter the workforce. Much of the program was modeled off of Jobs for Americas Graduates. The program provided students with the following:

- A work-ready certificate

- A scripted curriculum aligned with career-work-ready certificate and passing the GED
- Content-relevant software designed to address the level of reading skills of the student
- Dual enrollment and/or national recognized industry–based certification training
- Pre-employability skills training
- A one-on-one mentor
- Work experience or internship

The program uses Federal TANF funds, and costs about $2.5 million per year. Jindal emphasized the role of business and industry in the program, stating "Our businesses play a central role at the state level and on the ground, helping us to identify needed training for our states' workforce and partnering with schools to prevent children from dropping out."

After its launch, no further information about this program is available.

Another model led by the Southern Regional Education Board (SREB) joins partner states in the Preparation for Tomorrow (PFT) that blends academics with technical knowledge and skills, along with habits, behaviors and mindsets for success. The consortium has agreed to curricula, assessment and staff development components to ensure fidelity of implementation at various school sites. Each course has a syllabus that includes instructional philosophy, course standards, instructional delivery and support systems, assessment and a recommended grading system. The initiative includes a two-week summer institute for teachers. The partner states have identified emerging career areas for which curricula are being developed. SREB anticipates schools will redesign their CTE programs to fit a model that blends curricula and emerging career areas. SREB has developed a counselor training module that is being considered by a consortium of the City of Phoenix, postsecondary representatives, and Phoenix Union High School District. The City of Phoenix presented to the task force about that component at a recent meeting.

Little comprehensive research has been done on specific models or initiatives to show what works, and what doesn't. However, ***one report does comment on K-8 programs and the opportunity for effective career awareness and development programs*** that incorporate:

- Lifelong learning
- Understanding of careers and information on careers
- Understanding of self, interests, and skills
- Developmental steps
- Connections between career development and academics
- Value of integrated classroom learning

According to the National Governors Association, many states have had similar conversations but none have really succeeded at implementing a comprehensive statewide business/education partnership for dropout prevention and industry certification. The current up and coming model has specific industries taking the lead – such as the C-Tech model in New Jersey, discussed below.

Employer-led initiatives

In New Jersey, the C-Tech Certified Program is a private organization that prepares students for entry-level employment in telecommunications connectivity. (http://www.c-techtraining.com/profile_corporate.htm) Industry partners approve the certification for content and applicability and align to national certifications such as A+ and Cisco level one. The program uses TV and radio ads, online videos, reengagement/resource fairs, public material placement, posters and dropout recovery events, collaborations with schools/districts, social service agencies and community based organizations to locate students and market the program. The National Dropout Prevention Center rates this program as "moderate evidence of effectiveness." The program was launched in 1996 and costs about $500 per student. The program has a 98% completion rate and a 95% certification rate.

Specific industries such as manufacturing and construction have created state-level initiatives that combine skills certificates with "marketing" about the value of a skilled trade. For example, the ***National Manufacturers Institute*** has developed a framework for developing an employer accepted industry certificate that the education community can implement, creating more relevance and a seamless pathway from education to career. In Alabama ***"Go Build"*** has developed a website and marketing with Mike Rowe that encourages students to explore these careers (http://www.gobuildalabama.com/). This organization is also interested in locating in Arizona. Preliminary meetings have indicated a willingness to partner with other Arizona activities, discussed below, rather than creating another silo.

Arizona Context:

In Arizona, the CTE/Business and Industry connection has attracted stakeholders from around the state to several initiatives. Several school districts have launched their own programs, such as ***Peoria Unified School District's model pathways program*** which develops complete programs of study around clusters, called MyLife. Task Force member Patti Beltram presented on the MyLife program to the Task Force last year. The Arizona Department of Education has also launched partnerships with various industry clusters.

From the business side, ***the Arizona Chamber of Commerce has embarked on a workforce development project that links the ADE's CTE department and the Arizona Skills Standards Commission with the Commerce Authorities "sector strategies" and the Chambers vision of "Southwest Direct."*** The group has identified manufacturing as the first industry to align education and certificates with industry needs and is in the process of creating a 501c(3) called Arizona Manufacturing Partnership that links education and industry to build the use of these certificate programs in high school and create the skilled workers needed by the manufacturing industry.

The Arizona Skills Standards Commission has been working on a similar issue for many years. The Commission is comprised of many business and industry leaders from a wide variety of sectors. The commission approves an inventory of skills needed for various skilled jobs, while the University of Arizona's Workforce Education Development Office (WEDO) works closely with Arizona business and

industry to validate skill standards and measurement criteria and award certification of skills to students completing one of approximately 70 CTE programs. The Arizona Skill Standards Commission was established to validate and recognize state-established, industry validated skill standards that guide curriculum development, skill assessment specific to CTE programs, and documentation of skill attainment for students preparing to enter the workforce and/or transitioning to post-secondary education.

While Arizona has a strong tradition of CTE connections to business and industry through the 14 Joint Technical Education Districts, and the programs discussed above, the state has yet to achieve a strong sense that education and economic development have truly cemented the links and partnerships needed to be successful.

The most recent evidence of that came from the March of 2013 National Pathways Conference at Harvard University. Arizona sent 16 individuals to the conference including the State Superintendent, various non-profits, representatives from business and leaders of educational reform efforts in our state. The conference centered around three conclusions from a 2011 Harvard report, *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*. The report does not suggest an educational "program" but rather concludes three cultural changes to the educational system in America, which have been subsequently incorporated in ADE's strategic plan for CTE. Those changes include:

1. The current system of education places to much emphasis on a single pathway: attending and graduating from a four-year college after completing an academic program of study in high school. It is long past time that we broaden the range of high quality pathways for young people to achieve economic independence. (Perception based on tradition)
2. In an effort to construct a more effective network of pathways to prosperity it will require a sea change in the role of business and other employers in education and especially in CTE. (Partnerships)
3. Revisit the social contract between youth and society that ensures by the time they reach their early 20's they are equipped with the education and experience needed to lead a successful life as an adult including having cleared the initial but essential hurdle of graduating from high school. (Social Contract)

After returning to Arizona, the state team met again and discussed:

- Sense of urgency around this issue
- Undeniable link between quality of education and vitality of economy
- Pathway effort cannot be another "program"
- Existing initiatives will have to be supplemented to achieve the three cultural shifts above
- Need for enhanced business involvement
- Need to agree on critical definitions such as
    - "College ready" – needs to conclude community college, technical schools, etc.
    - Educational success – economic independence

- Need for all students to have the opportunity to participate in a career awareness and exploration program before ninth grade, and leave eighth grade with an individual career plan (ECAP) and program of study
- CTE must be viewed as equally valued to the university path and recognized by all stakeholders as pathways to economic independence – requires extensive fact based communication plan to all stakeholders – may be the biggest obstacle
- Need to identify measure of educational success – but do it thoughtfully
- Each pathway must provide for globally competitive outcomes
- Need to incubate CTE best practices and become more nimble at change to bring good programs to scale
- Need to rapidly apply the applied learning method to all of education
- Need to ask any educational content, "what is the application of what I am asking these students to learn" - if one cannot be found then a logical response is that it should not be taught
- Need to award academic credit for academic content in CTE courses
- All students should have a work based experience proper to graduation – requires full engagement of the states' business community
- Every initiative must include a discussion of how the ideas can be optimized in rural and remote schools
- Must avoid the "invented here" syndrome

The Morrison Institute for Public Policy released a report which highlighted the benefits of CTE called "On the Rise." The report identified several challenges to elevating the CTE skill pathways in Arizona, along with possible solutions. (See attached.) This task force was identified as a possible champion to solve one key challenge: Lack of a common definition of key terms like career ready, college ready, educational success, seamless, pathways, work experience, career awareness, business and industry partnerships, etc. Several other of the challenges listed could also be addressed or championed by this task force.

Available Actions:

1) Champion earlier ECAP and career pathway links – as early as 5th grade
2) Research opportunities to have 4th year of math support career pathways rather than hinder
3) Support programs of study that lead to High School Graduation AND industry certification
4) Change State WIA Plan as it relates to Perkins Law to allow for AA degrees
5) Engage in industry certification development as part of the Arizona Chamber of Commerce project
6) Identify opportunities to address issues identified by the attendees at the Harvard conference
7) Champion issues identified by Morrison Institute report
8) Encourage Arizona's leading educational organizations to coalesce efforts that non-BA jobs can be rewarding and pay well – this requires communications and outreach that ADE can't do.
9) Bring together the multiple Arizona groups working on this issue to develop a unified plan and identify any actions needed at the legislative or gubernatorial level.

10) Consider focusing on career ready language over college ready language – for example, Post-secondary and Workforce Readiness (PWR) has been adopted by Colorado.

Other Considerations

- There is a tension between career ready and college ready – still need to support college going while acknowledging other pathways to careers; how to make it a "both/and" not "either/or" by showing students the opportunity to "drop in" and grow on the post-secondary pathway
- Business needs and economic reason to stay engaged
- Need to be careful of one particular industry co-opting educational system – which is how South Carolina is being perceived
- How does education partner with business without narrowing too much focus? Business tends to over customize what it wants in high school. Need to take what's common among multiple industries and business pays to play for customization, or does it themselves
- Role of Work-keys, which identify skills and application level